IN THE CLAIMS:

1.   **(Currently Amended)** A method of automatically fabricating a suprastructure to be attached to an implant with the help of a digital model description of the shape, comprising the following steps:

recording a real clinical situation or a shaped clinical situation of the implant as digital data,

analyzing this situation and determining ~~the~~ an implant axis,

computing ~~the~~an optimum shape of the suprastructure,

automatically separating the suprastructure into a first element ~~(1)~~ and a second element ~~(2)~~, and

fabricating the ~~individual~~first and second elements from one or more blanks on the basis of said digital data with the aid of machining equipment.

2.   **(Currently Amended)** A method as defined in claim 1, ~~wherein~~comprising determining a mating surface between the digitized first element of the suprastructure ~~on the one hand~~ and the digitized second element of the suprastructure ~~on the other hand, is determined~~.

3.   **(Previously Presented)** A method as defined in claim 1, wherein the shape of that element of the suprastructure which is to be connected to the implant is described by at least two of the following parameters: the shoulder width, the tilt angle of the suprastructure relative to the longitudinal axis of said implant, the angle of rotation of

2

the suprastructure about the longitudinal axis in said blank, and the height of said post.

4. **(Previously Presented)** A method as defined in claim 1, wherein one element of the suprastructure is an abutment and the shape of an abutment is optimized with reference to one or more or all the following parameters:

a minimum value for the shoulder width;

a maximum height of the post delimited by the tilt angle of the suprastructure relative to the longitudinal axis of said implant, the geometry of said blank, and the height of the occlusal surface, the maximum height of the post being such that it is disposed at a maximum distance below the height of the occlusal surface;

a minimum height of the post delimited by the position of the head of an occlusal screw;

an angle of rotation of the abutment about the longitudinal axis in said blank, which is given by the relative position of said implant in the clinical situation.

5. **(Previously Presented)** A method as defined in claim 1, wherein the shape of said blank and the shape of the dental suprastructure are described in the coordinate system of the geometry for attachment to said implant.

6. **(Currently Amended)** A method as defined in claim 1, ~~wherein determination of~~comprising interactively determining the axis of said implant ~~is effected interactively~~ by ~~the~~ a user.

7. **(Currently Amended)** A method as defined in claim 1, wherein ~~one~~the first element of the suprastructure is an abutment and ~~a further~~the second element of the suprastructure is a crown.

8. **(Currently Amended)** A method as defined in claim 1, wherein ~~one~~the first element of the suprastructure is an abutment and ~~a further~~the second element of the suprastructure is a cap.

9. **(Currently Amended)** A method as defined in a claim 1, wherein ~~one~~the first element of the suprastructure is an abutment and ~~a further~~the second element of the suprastructure is a reduced crown.

10. **(Currently Amended)** A method as defined in claim 1, wherein the suprastructure comprises ~~three elements, and~~ a first element ~~of~~in the ~~suprastructure is~~form of an abutment, ~~and~~ a second element ~~of the suprastructure is~~in the form of a partially veneered crown, and ~~the~~a third element ~~is~~ in the form of a veneer, and not only the mating surface between said first and second elements but also a mating surface between said third element and said first element and/or said second element is/are computed.

11. **(Previously Presented)** A method as defined in claim 1, wherein said suprastructure comprises a number of abutments which are interconnected by a common frame construction.

4

12.   **(Previously Presented)** A method as defined in claim 1, wherein the distribution rules can be varied by the user.

13.   **(Previously Presented)** A method as defined in claim 1, wherein that element of the suprastructure which is connected to the implant is computed in its final size and the further element of the suprastructure connected to this element is computed as a provisional suprastructure having exterior dimensions which are smaller than the final exterior dimensions while retaining the mating surface.

14.   **(Previously Presented)** A method as defined in claim 13, wherein the same data set is used to compute said element of the suprastructure with its final dimensions.

DC01\139362.1
ID\RHT